

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 1-26 without prejudice to their presentation in other applications. Please enter new claims 27-48.

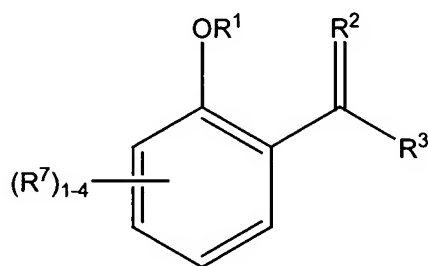
Listing of Claims:

Claims 1-26 (canceled)

27. (new) A method for the treatment of onychomycosis comprising:

topically administering a composition comprising:

a compound according to formula I, and salts thereof;



(I)

where R¹ is hydrogen, alkyl or aryl;

R³ is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R² is O or S;

each R⁷ is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

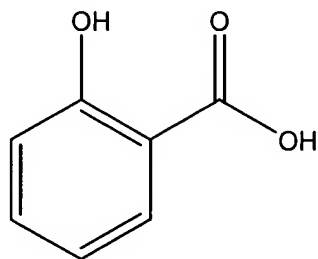
a transition metal coordination complex;

dissolved or suspended in a pharmaceutically acceptable carrier.

28. (New) The method according to claim 27 wherein the composition further comprises a boric acid.

29. (New) A method for the treatment of onychomycosis comprising:

- (a) cleaning a selected topical area for treatment;
- (b) topically administering a composition consisting essentially of;
a compound according to formula II



(II)

;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

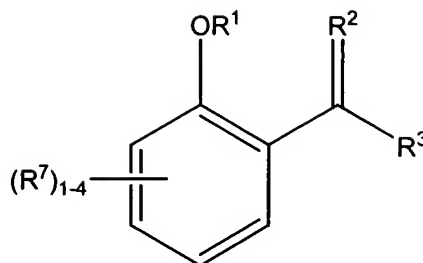
a transition metal coordination complex;

dissolved or suspended in a pharmaceutically acceptable carrier and pharmaceutically acceptable salts thereof.

30. (New) The method according to claim 29 wherein the composition further comprises boric acid and the step of cleaning further includes debriding.

31. (New) A method of preventing onychomycosis on a mammal comprising:

- (a) administering to a selected site an effective amount of a composition consisting essentially of; a compound according to formula I and salts thereof



(I)

where R¹ is hydrogen, alkyl or aryl;

R³ is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R² is O, S or N;

each R⁷ is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

a transition metal coordination complex.

32. (New) The method according to claim 31 wherein the composition further comprises a boric acid and the method further comprises topically administering a barrier composition to the selected site.

33. (New) The method according to claim 31 further comprising cleaning the selected site prior to administering to the selected site an effective amount of the composition.

34. (new) The method according to claim 27 wherein the copper composition of the compound is a copper complex.

35. (New) The method according to claim 34 wherein the copper complex is a diamine polymer-copper complex.

36. (New) The method according to claim 27 wherein the coordination complex of the compound is a Co chelate or complex.

37. (New) The method according to claim 27 wherein the coordination complex of the compound is a Zn chelate or complex.

38. (New) The method according to claim 27 wherein the coordination complex of the compound is a Fe chelate or complex.

39. (New) The method according to claim 27 wherein the polyhydroxy aromatic compound of the composition is a 1,2,4,5-tetra hydroxy benzene.

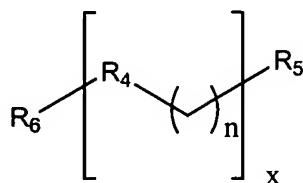
40. (New) The method according to claim 27 wherein the peroxide of the compound is an organic peroxide.

41. (New) The method according to claim 27 wherein the peroxide of the compound is an inorganic peroxide.

42. (New) The method according to claim 27 wherein the peroxide of the compound is hydrogen peroxide.

43. (New) The method according to claim 27 wherein the hydrophilic carrier of the composition is between about 50% to 99% water by weight.

44. (New) The method according to claim 27 wherein the hydrophilic carrier of the composition is between about 1% to 50% a compound according to formula III:

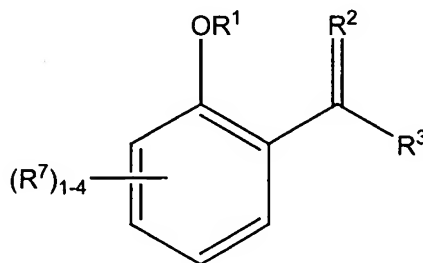


(III)

wherein R₄ is a heteroatom, R₅ is heteroalkyl or GH where G is a heteroatom and R₆ is hydrogen, alkylaryl, aryl or heteroaryl and n and x are independently between about 1 and 20.

45. (New) The method according to claim 27 wherein the hydrophilic carrier of the composition is between about 0.1% to about 30% ROH by weight, where R is alkyl or aryl.

46. (New) A method of preventing onychomycosis on a mammal comprising:
(a) administering to a selected site a composition comprising;
a compound according to formula I and salts thereof;



(I)

where R¹ is hydrogen, alkyl or aryl;

R³ is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R² is O, S or N;

each R⁷ is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

a copper composition;
a peroxide;
a polyhydroxy aromatic compound;
a transition metal coordination complex;
a boric acid composition.

47. (New) The method according to claim 46 further comprising administering a barrier composition to the selected site.

48. (New) The method according to claim 46 wherein the barrier composition is a barrier to water.